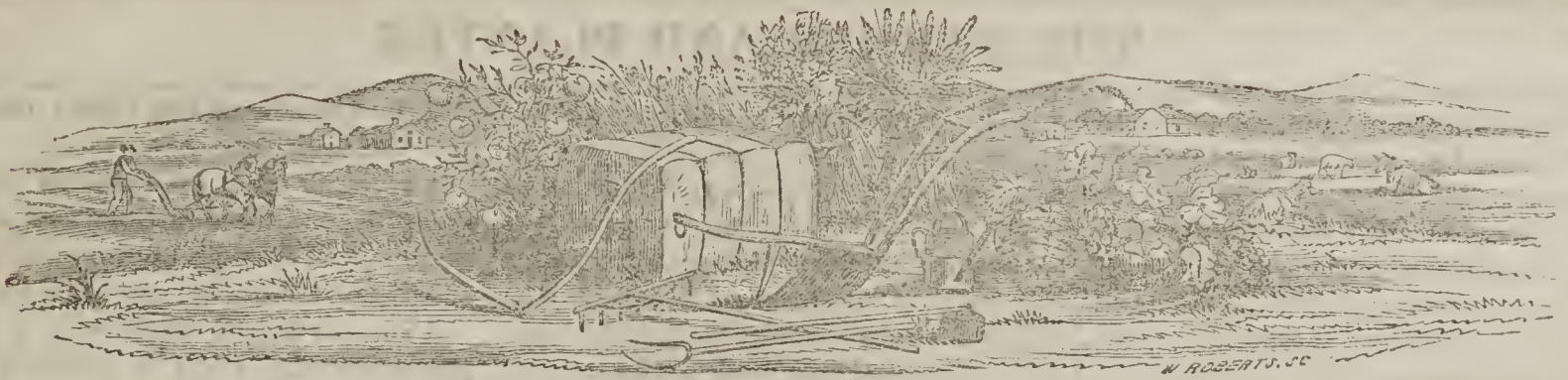


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FARMER AND PLANTER.

DEVOTED TO AGRICULTURE, HORTICULTURE, MECHANICS, DOMESTIC AND RURAL ECONOMY.

VOL. III.

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Fruits.—No. 2.

MESSRS. EDITORS.—On my return some two days ago, from my orchard in the Southern part of the State, I found, among some other letters awaiting me, yours of the 14th January, and I take this opportunity to acknowledge its receipt. I assure you that it always affords me pleasure to exchange ideas with every one on the subject of fruits. Every one is said to have a hobby upon which they are ever ready to ride, and unless they find company of the same kind with themselves they may become troublesome. If I have one, it is fruit, and as you seem to be fond of the subject, I write without fear of tiring you with my remarks.—From your observations about the pear I should from my little experience be led to differ with you about grafting them on the quince stock, for two reasons. The first is, they are too short lived; and the second, they are dwarfed. I am opposed to dwarfing any kind of fruit, never having been able to bring it to that perfection I desired. The quince, in this climate, is like the apple, and I think will not pay for rearing, or answer well for stocks.

I have tried working the apple, pear,

and quince together in different ways, but have come to the conclusion that they had best be kept separate. The apple and quince are too short lived for stocks for the pear, and if the pear is substituted as a stock for the apple it becomes a dwarf, and the fruit is not as fine as it ought to be. The pear should always be grafted, as eight to ten years may be saved in its bearing. Seedling roots are the best, but if they can't be had, take young scions from around the trees and set them in the nursery, and graft on them. I find no difficulty in getting some fruit on many varieties of the pear the fifth year from the graft, if the trees are well cultivated and on good ground.

The Prince of Orange, the Bartlet, Buerredial, Jargonot, Skinless, and several other varieties that I have tried, come early into bearing, if grafted on native roots and manured highly.

As to the use of soapsuds, as you remark, there can be no difference of opinion among those who have used it. It is good in any quantity, and applied at any time, but will produce the most effect on land that has a good deal of coarse vegetable matter in it. Washing the trees or scraping off the dead bark, is like currying a horse, and will have the same good effect upon it. They are, in fact, living things, and need attention as such. The ground should be well cultivated and the tree kept free from insects, and fed with those kinds of manures that are adapted to their growth and the production of fruit. I am clearly of the opinion that not only the appearance and quantity of fruit may be improved by the application of the proper kinds of manure, but the quality may also be improved.—Lime, ashes, soapsuds, or any alkali will add greatly to the quality of the fruit, if

used freely on acid soils. And a free use of ley soap on the bodies of the trees will not only keep them free from worms and mould, but will dissolve the gum that runs out of the plum, apricot and peach, and keep the body free from the bad effects produced by it.

* * * * *

I had forgotten when on the subject of manure to notice your remarks about salt. I have tried it and am prepared to say that the plum, peach, and nectarine will be benefited by a free use of it, though I would not recommend the use of it with the apricot or pear.

Yours, respectfully, YAZOO.
Society Ridge, Miss., Feb., '52.

Barley.

MESSRS. EDITORS:—You desire information with regard to the use of barley. I am sorry to see you condemn so valuable a grain as barley. I think we should be fully satisfied that the fault was in the grain before we condemn it. May the error not be in ourselves—not having the land in proper condition when sown, or not sowing in proper time and place—above all, not using it at the proper time? We would be just as excusable for condemning a good clock when set up to run, without any regard to the correctness of the time, as we would be to condemn the use of barley, or any other good grain, without a thorough knowledge of the proper mode of using it to the best advantage.

I quit the use of barley for a while precisely where you begin—at the appearance of the head, or at the change. I commence the use of barley as soon as we can cut it with a cradle for horses, and continue to use it until the change takes place, after which time the beard becomes too stout and dangerous—for

hogs it is good all the time, either as pasture or grain, the beard does not hurt the hog, because he does not eat it.

I thresh my barley in the threshing machine, precisely as we do wheat, taking out all the riddles to prevent the beards from choking the fan. After the barley runs through the fan, we run over it with sword sticks, in order to take off all the beard; and, when properly cleansed, grind the grain, cut up the straw, and mix the barley meal with the straw. If there is anything better for horses than this, it is the young barley from the time you can cut it, up to its heading, with a little corn. All of this feeding is done without a beard to be found sticking in or about the mouth.

Perhaps I may at some future time give you a line or two on embankments, as I am progressing pretty well at that business, at this time.

If you think my remarks will be of any benefit to your readers, they are at your service. With much respect, I remain, yours, &c., W. D. A. D.

Laurens Dist., Feb. 1852.

REMARKS.—We were somewhat surprised on reading the above article from our friend W. D. A. D., that he should have so construed our remarks on barley (No. 12, Vol. 2), as to arrive at the conclusion that we had "condemned so valuable a grain," &c., as we had no recollection of so doing, and on turning to the article we find, as we think W. D. A. D. will—making a little allowance for a want of perspicuity in expressing our meaning—that we did not *condemn* barley in any shape, but only disapproved of its use at a certain stage of its growth, and being fed in a certain way, viz: after it had come fully into head. And if we are not mistaken in the meaning of our friend's article, he does the same; for he says he leaves off the use of barley for a while, just where we begin, &c., and we find he does not use it afterwards until he has threshed and deprived it of its beard. He then grinds and mixes the meal with the cut straw—so prepared he finds it, as we have not the least doubt, a valuable feed for horses, &c. In conclusion we thank our friend for the information he has given us and our readers as to the proper time of feeding barley in its green state, for we, and all others that are so fortunate as to have it growing this scarce year, will have pressing occasion to give it a fair trial, as soon as it will admit of cutting. We have found no difficulty in growing barley when sown as recommended in the remarks alluded to, and have at present some very fine lots on which we have been grazing calves and sheep, occasionally, for some time past.—Eds.

Setting Kettles for Boiling Food.

The importance of cooking food for fattening animals having been conclusively settled, and now universally ad-

mitted, the cheapest and most economical manner of performing this process, as relates to the consumption of fuel, is worth the inquiry. Some over particular persons, in constructing a furnace for this purpose, build a spiral flue around the caldron, on the supposition that the longer they can keep the heat in contact with the kettle, the more economical. This form of construction is bad; it destroys the draft and renders the fire black and sluggish, and to form the spiral draft requires so much masonry to touch the kettle, that not more than one-half the surface is in contact with the heat, and therefore is lost as a conducting agent.

It is not advisable to set a caldron capable of containing less than sixty gallons, and if ninety gallons or three barrels, the better.

In laying out the plan for the brick work, take the diameter of the kettle at the largest point; add to this, twelve inches for a six inch space on each side, and to this, twice the thickness of both walls, and, in the direction that the flue or arch is intended for receiving the wood, add two feet, so that the structure shall be two feet longer than its width.

Kettles, now a days, have a projecting flang at the top, and two horns to rest them upon the brick work. By means of chains or ropes, suspend the kettle over the exact point where it is intended to be fixed—its bottom at the right distance from the bottom of the fire pit, to allow a proper quantity of wood to pass under—then carry up the walls to the height of the mouth of the arch, which is to be in one end of the longest direction of the furnace. At this point place some iron bars over the arch and one across, near to that side of the kettle, and lay over the arch, and up to the kettle and half way around it, two courses of bricks—touching the kettle at a point where the sides commence rising—by which arrangement the fire is made to impinge against the centre bottom, and, passing past the centre, returns around the sides and passes up the chimney over the mouth of the arch. The structure is then complete by bringing the walls to the height of the kettle—gathering in towards the top, so that the entire flang rests upon the brick work.

By this construction it will be seen that the fire strikes against the bottom, and passes up the end and back around the whole body of the boiler, not injuring the draft, and brings the blaze in contact with the entire surface, except where the

two thicknesses of the bricks touch it over the arch.

A seven or eight inch pipe, of which a cheap, second-hand article can always be procured, answers all the purposes required for a chimney, and costs less.

A smaller kettle, fitted with a steam pipe and steam chest, is probably altogether the most desirable method of cooking food for animals; but its preparation in a proper and substantial manner involves an expense of fixtures—an outlay that but few farmers are willing to encounter, for merely fattening the animal for household use.—*Rural New Yorker*.

Management of the Compost Heap.

BY PROF. J. J. MAPES.

Since the abandonment by many farmers of the open barn-yard system, and the daily removal of refuse as well as fecal matters to the compost shed, it becomes important to adopt the best methods for the management of composts.

When composts are immersed in water, as in the bottom or *dished* barn-yards—the presence of the water prevents the admission of the atmosphere, and the decomposition is necessarily slow for want of atmospheric assistance; while the small portions containing the larger proportion of nitrogen, decompose, assume a gaseous form, and rise up through the water, escape in atmosphere, and are lost.

If manures are placed in a heap, without a proper degree of moisture being added as required, the decomposition proceeds too rapidly in parts, causing some of the woody fibre or the straw, &c., to be reduced to an ash, and presenting the appearance known as *fire-fanged*; and from such parts all the more valuable or ammoniacal portions are lost, for they ascend through the heap and into the air, from the sudden expansion caused by the great heat given off by the fire-fanging portions.

Every farmer is familiar with this action, and cannot but recognize its truth.

Many operators endeavor to prevent fire-fanging by turning the heap often, and this is frequently done while the heap is in heat, thus exposing new surfaces and causing an immense loss of ammonia.

It is therefore evident that some plan should be adopted which would ensure a proper degree of moisture to the compost heap to prevent fire-fanging, to secure the lower part of the heap from being immersed in water, and to do away

with the necessity of frequent turnings, and consequent loss of ammonia. Added to these, the plan adopted should be such as to secure an intimate admixture of all the parts of the heap. All these desirable conditions may be availed of by the following plan:

The compost heap may be of any length and of any width, but should never exceed six feet in height, and should be covered so as to prevent unnecessary exposure to winds, drenching rains, &c. It should be placed on the ground so as to make one end lower than the other; and at the end a cistern or sunken cask should be placed, to receive the drainage of the compost heap. In this cistern should be a pump for forcing the drainage twice a week, or oftener, on top of the heap; and if at any time the cistern should be dry, water should be added to it, until the compost heap contains such an amount of moisture as to re-fill the cistern twice per week.

On top of the heap a gutter should be placed for its whole length, with small holes in its lower part, and the fluid from the pump will be thus more evenly distributed. The gutter may be moved from time to time, as occasion may require, so as to water the top more evenly.

By such an arrangement the soluble parts of every particle of the manure will be continually changing places, the richer portions furnishing the necessary ingredients to enrich the more inert parts, and thus causing a more intimate admixture than could be obtained from one hundred turnings of the heap with a fork.

Manures thus fermented will not decrease in bulk as when ordinarily treated, and the value will be much greater. When the materials used are rich in nitrogenous matter, then coats of muck, river mud, leaves from the woods, headlands, &c., may be thrown on every day, in addition to the dung from the stables, and when the heap arrives at the proper height the top should be covered with decomposed muck, or other cheap organic matter, to absorb the gases, should any arise; while the descending fluids, after being pumped up from the cistern will charge such inert matters with all the constituent parts of the mass below. As the fermentation proceeds, many substances will be rendered soluble by chemical action, and, after full decomposition, the gases having been all absorbed by the more inert portions, the manure will be of even quality.

We have so made our composts, and, by proper additions, have been able to use many times the bulk of swamp muck to that of stable manure used, every load of which was superior in quality to pure barn-yard manure which had been ordinarily treated, the valuable portions of which had been lost.

In this cistern may be thrown all the wastes of the house, soap-suds, urine, night soil, &c., &c.; and where the soil is known to require super-phosphate of lime, chlorine, soda, potash, or any other soluble substance, it may be thrown into the cistern and be evenly disseminated through the heap.

In cold weather, if the fermentation be sluggish, hot water may be run into the cistern, and immediately forced upon the heap, and, sinking into the mass without losing heat, the whole quantity will readily become affected.

After the heap is supposed to be sufficiently fermented, or a few days previous to its use in the field, a pint of sulphuric acid for every cord of manure may be thrown into the cistern, applying a part of the required quantity each day for a few days, and pumped upon the heap; this will change all the carbonate of ammonia and other volatile matters into sulphates, which are not volatile, and will prevent their evaporating during removal, exposure when being plowed in, carting, handling, &c., &c.

A gutter from the hog pen, running to this cistern, and a fair supply of water to the pen, will, for many crops, supply an admirable addition, and will so divide the pig manure through the mass as to prevent the usual difficulties arising from the use of pig manure, such as clump rooting, &c., &c.

For market gardeners, and others requiring liquid manures, the plan proposed is very effective, for any amount of water may be passed through the heap, and removed from the cistern for distribution on the soil. As the fermentation proceeds, the quantity of soluble matter is increased, and its quality may be varied at pleasure by the addition of other ingredients.—*Journal of Agriculture.*

Testimony of Practical Farmers in Behalf of Deep Plowing.

MR. EDITOR:—In travelling through various sections of Pennsylvania, my attention has been arrested by the very shallow plowing done by most farmers. This reprehensible practice prevails to as great an extent in countries where the soil admits of plowing to the depth of

seven or eight inches, as in those where it is thin and poor; and it appears to me that it is the result not so much of a desire to evade the difference in the amount of labor as of an ignorance of the immense value of deep plowing.

I am a plain farmer, pretending to no scientific knowledge, although I have the advantage of some forty years practical experience. I will not, therefore, attempt to give you any scientific reasons for my strong faith in deep plowing, but will call your attention to a few facts which speak more loudly to the minds of practical men, than scientific theories.

In the year 1847, I purchased the farm on which I now reside. The condition of it at the time of purchase was most wretched. Fences were torn down, the house was fast going to decay, and the barn and out-buildings too bad to shelter stock or protect produce from the weather. The land was in worse condition still. For years it had been rented out, and, as is usually the case with tenants, everything was taken from the soil which it would yield, and when at length it was worn out completely, it was turned out, like an old horse, to die.

The land was originally as fine as any in Lancaster county, a fact of which I was fully aware. I had for years observed the mode of plowing adopted by the tenants, and felt satisfied that one of the principal causes of the wretched condition of the farm was the "skinning" system pursued by them. My first step, therefore, was to remedy this evil. My horses being of the kind familiarly known as the "Conestogas," and my plows, those manufactured in our own country, (which, for adaptation to heavy soil, are the best I know of,) I commenced the work of renovation. A good motto for every farmer, is, "go to the bottom of things." I determined to follow it, and went to the bottom of the soil on my farm. It was hard work, and my "Conestogas" team felt it. But I fed well and continued the undertaking. Every acre was plowed to the depth of eight inches, and soil was brought to light and air which had not seen either for a quarter of a century. Some of my neighbors looked in upon me and nearly all predicted that I would get tired before I was done.—This, however, did not discourage me.—I persevered until the whole was completed, applying to the land all the barn-yard manure I could gather, and when that failed, putting on lime.

What was the result? The result

was that the first crops of wheat and corn were treble the quantity of those taken from the farm when under lease. I had nearly 30 bushels of first rate wheat to the acre, which was as good a yield as that of any of my neighbors' farms. A field from which, all told, six small two-horse loads of hay had been gathered; two years after yielded me thirty nine larger loads! My corn was good and I was satisfied with the result of my experiment.

As my means of feeding stock multiplied, I increased the number, so that my manure heap increased in size and value. The deep plowing was persisted in, and with this gratifying fact accompanying it, that where I plowed to the depth of eight inches before, I could now plow to the same depth with as much ease as my neighbors could to a depth of five inches. This was another spoke in my wheel and my neighbors began to see it. I was pleased to observe that several of them set their plows a little deeper, and that the benefits of giving the sub-soil a chance to speak, were beginning to be appreciated.

During the past season I have had my faith in deep plowing greatly strengthened. While many farmers complain of considerably less than an average crop of corn, mine has never been better. During the drought, when in other fields the corn looked sickly and yellow, mine grew strong and vigorous, and throughout the season retained a rich green color.

Now, Mr. Editor, while I give the lime and manure I have applied to my farm, all the credit they deserve, I attribute its present good condition mainly to *deep plowing*, and in concluding this plain statement of facts, permit me to say to farmers everywhere, that the first plowing is the only one that need be looked upon with dread. When once the soil is loosened thoroughly to the depth of eight inches, it can be kept loose with very little more labor than where the average depth of plowing is five inches. And I am fully convinced of the fact that were the labor double that of shallow plowing, it will pay better to go to the bottom every year, than merely to skim the surface.

The above is from the *Penn. Farm Journal*, and fully accords with the testimony of all who have pursued the system recommended by him.

Many farmers who were distrustful of

the benefits to arise from deep plowing, have commenced by plowing the surface soil to the usual depth and running a sub-soil plow in the bottom of each furrow, thus permitting the atmosphere to enter the sub-soil without mixing the upper and lower soils. Our readers will recollect the evidence of one of our correspondents at Weston who tried this system on every other land in a ten acre field—the result was that 85 ears of corn from the sub-soiled lands filled a two bushel basket, while 115 ears from the unsub-soiled lands were required to fill the same basket.—*Working Farmer*.

CUTTING HAY STRAW AND CORNSTALKS.

—It has been ascertained by careful experiment, that there is a saving of at least one-fifth of the amount of fodder by cutting it fine before feeding. Stock eat cut fodder much quicker and more easily than uncut; it digests better, and is consequently more nourishing, and last, but perhaps not least, it makes a richer quality and larger quantity of manure.

Hay cutting machines are of great variety of pattern, and comparatively cheap now. The common cutting box will answer for one or two animals, and may be had for \$3. The hide roller or spiral knife cutter is an excellent implement for cutting hay or straw. It will cut a ton in an hour and a half to eight hours, depending on the size. It costs from \$6 to \$28. The cylindrical cutter is well adapted for hay, straw, and corn stalks. It is very strong and may be operated by hand or horse power. It will cut a ton in an hour and a half to three hours, depending on the size. The price varies from \$25 to \$45.—*Er*.

A REMEDY FOR STAINS.—Take one pound of chloride of lime, (bleaching powder,) and put it into a gallon of cold water, stir it well for a few minutes, and allow it to settle. Pour off the clear liquor, and keep it in tightly corked bottles. Stained clothes—linen or cotton—after being washed to free them from grease, by dipping the stained parts in this chlorine fluid, will cause the stains to be removed quicker, safer, and with far less trouble than by any other known means. In the laundry, this fluid should be kept in a large stone-ware or glass vessel. It should be large enough to dip in the articles so as to cover them entirely in the liquor, where no harm will result if they lie for some hours. A careful laundress should also have a vessel of very diluted sulphuric acid, to dip the ar-

ticles of clothing in after they are taken out of the chlorine and washed. The clothes should be well rinsed, using three waters afterwards. This is a bleaching process, nearly the same as that practised in bleach-works.

A little of the salts of oxalic acid put on an iron stain, and a little hot water poured on it to dissolve it, will remove the stain very quickly without injury to the cloth.

Our readers may place the utmost reliance in what we have said, we are acquainted chemically with the whole process. Oxalic acid is a poison and should be kept out of the reach of children.

It is very difficult to remove stains from woollen goods. If the woollen cloth is white, some sulphuric acid in very hot water may remove it, if it is an iron stain. It may also remove it without injury from a cochineal red shawl, but such jobs should be left to the dyer.—We only recommend the above process of ours for white linens. By our advice, a number of friends employ it in their families and are delighted with it.—*S. American*.

Native Grasses.

MESSRS. EDITORS:—Phoenix-like, your valuable journal has risen from its ashes, and I am now edified and instructed by the perusal of your December No., which abounds with useful knowledge.

I was really pleased to hear from your old and valuable correspondent, Dr. Phillips: his excuse for his defalcation in not attending the Agricultural Fair, was all-sufficient, for he was engaged in a noble work, a service from which no earthly consideration can absolve him: it is truly "the higher law." Duty and secular concerns all sink into perfect insignificance, when compared with our duty and obligations to our heavenly Creator, the great Sovereign of the universe. Would to God the land were filled with such men. Vice and immorality would be driven out of our land, the makers and venders of alcohol, who spread woe and desolation among us, would hide their heads, and we would no longer be afflicted with that blight, that mildew, intemperance.

I am inclined to think, from all that I can learn, that the Dr.'s opinion in relation to the present crop, is not far wrong. In some sections of country there is evidently a falling off, but in this portion of Alabama the crop is fully an average one; indeed, upon our sloughs and black lime land, the crop may be said to be heavy.

In an essay upon our native grasses, I ventured the opinion that owing to the wretched husbandry of the cotton growing states, a million of dollars was annually lost through negligence. Since writing that article, I and some of my friends have been experimenting with our spontaneous or native grasses. The result of these experiments fully demonstrates the correctness of my high estimate of their value as shown by the following correspondence:

DR. N. B. POWEL:—Dear Sir: Agreeable to your request, I have saved the crab grass hay off of two acres of my corn land. The first acre upon the high land or ridge made 2,675 pounds of nicely cured hay. From the second acre, in the bottom, was saved 3,987 pounds. I have no doubt that every acre of our corn land would have yielded from a ton to a ton and a half of as good hay as we import from the North. I consider my hay more valuable than fodder, which is uniformly worth a dollar. I measured the corn that grew upon the first acre, which yielded 36 bushels: that at 60 cents per bushel, \$21 60—the hay at \$1 per hundred, \$26 75.

With high regard, yours, &c.,

S. POWEL.

Macon Co. Ala., Sept. 10 1851.

From the statement of Major Powel, it is manifest that our native grasses, by proper attention, may be made a source of national wealth. He thinks that seven hundred tons could have been saved on his farm, which, at \$20, would have brought \$14,000, worth more than the corn and cotton crop together. What wretched economy is ours. But I sat down to offer you my sympathies for your misfortunes, and to enclose my subscription for your valuable agricultural work. With my best wishes for your success with the Southern Cultivator, I am your obedient servant,

N. B. POWEL.

Chunnynuggee, Ala., Dec. 1851.

—Southern Cultivator.

Heaves in Horses.

It has often been remarked to us that the disease called "heaves" is more prevalent now than it was formerly. We cannot say whether it is a fact that there are more horses troubled with this disorder than there used to be, or whether, as there are more horses now in existence, there are consequently more seen troubled in this way, while the comparative number of diseased ones may be the same. We have never been fully satisfied in regard to the real cause of this disease, or the real seat of it. Every

one, however, can soon distinguish the symptoms. It consists in a difficulty of breathing, the flanks and respiratory muscles seem to do the whole work, and that too, very laboriously. The air is drawn into the lungs when the muscles at the flanks begin to draw in as if pushing out the breath, and after pressing in with a good deal of action, they drop suddenly as if a catch or spring had let go of them and they fall by their own weight.—There is also a dry, hacking cough attending the disease, and on driving the horse quick, the cough is often excited, and this laborious breathing is brought on very severely. This would seem to fix the seat of the disease in the lungs.—We have noticed, however, that heavy horses, as they are called, are generally enormous eaters, and if suffered to eat as much as they desire, will fill their stomachs to a most uncomfortable extent, and when thus distended, are much worse troubled than when sparingly fed.

Many causes have been alleged as producing this prevalence—such as feeding more freely on clover hay than formerly—dusty hay, caused by the smother of the modern horse-power threshing machine, in barns where hay is kept, &c., &c. It would seem, from the fact of an increased or morbid appetite in the horse, that the stomach has also taken on diseased action.

Various remedies have been proposed, and some of them relieve or palliate the disease for a time. We believe that care and attention in feeding is of great consequence. Don't let him fill his stomach too full with dry food. Let his food be moist, and of a nature that contains much nourishment in small bulk. You do not find heavy horses troubled much with this complaint while they are at grass. Then let their food approximate as near to the condition of grass as you can. Cut the hay—wet it, and sprinkle on meal.

A writer in a recent number of the *Rural New Yorker*, (J. Libbey, of Eagle Harbor, N. Y.,) speaking of this disease, attributes it to feeding on clover hay that has become dusty in consequence of being badly cured. He says that he treated a horse that he owned, and that had the heaves, in the following manner:—He took the hay entirely away from him, and fed him with straw, mill feed, (bran, shorts, &c., we suppose,) and grain. He thinks if he had cut the straw and wet it with oat or corn meal, it would have been better: but as it was, the heaves did not trouble him much.

Those who have horses that are troubled with heaves—and most heavy horses are those which are naturally most strong and active—should furnish themselves with a straw cutter and a mush tub, and give them cut and moistened feed.—They will thus not only keep their horses more economically, but will improve his health and keep him in a comfortable condition for any labor."

May we add to the above, from the *Maine Farmer*, that a single feed of carrots, per day, is the best preventive for heaves in horses. Many of our friends

have tried this remedy, and so long as they continue the use of carrots, the diseased horse is relieved.

Reduce the quantity of grain one-third, and substitute carrots in its place, is our rule, and horses seem to be rendered *pill-proof*, requiring no medicine, and enjoying fine spirits, loose hides, fine coats, and ability to perform full work.—*Ed. Working Farmer*.

CALIFORNIA VEGETABLES.—We clip the following from an agricultural address delivered by A. Williams, Esq., upon the opening of the new "Agricultural and Mineralogical Rooms" in San Francisco, a short time since. It will be seen that our friends of the New El Dorado have discovered that their soil produces other riches than gold dust, and are directing their energies with right good will to the development of the great agricultural resources of their wonderful country:

"I hold in my hand a statement signed by twelve citizens of the county of Santa Cruz—Messrs. McLean, Gibson, Mallison, Peck, Clements, Pedriot, Mills, Stephens, McHenry, Sanborn, Kifta, and Loveland—gentlemen of unquestionable integrity, an extract of which is as follows:

"On land owned and cultivated by Mr. James Williams, an onion grew to the enormous weight of 21 pounds; on this same land a turnip was grown which equalled exactly in size the head of a flour barrel. On land owned and cultivated by Thomas Fallen, a cabbage grew which measured while growing, 13 feet 6 inches around its body; the weight is not known; the various cereal grains also grow to the height of from 6 to 12 feet; one redwood tree in the valley, known as Fremont's tree, measures over 50 feet in circumference, and is nearly 300 feet high." Added to these astonishing productions is a beet grown by Mr. Isaac Brannan, at San Jose, weighing 63 pounds; carrots three feet in length, weighing 40 pounds.

At Stockton a turnip weighing 100 lbs. in the latter city, a dinner party for 12 persons, of a single potato, larger than the size of an ordinary hat, all partook, leaving at least the half untouched.—*Alta Californian*.

CHERRY SLUG.—The editor of the *New England Farmer* recommends wood ashes or powdered lime as a remedy for the cherry slug. He says, these adhere to the slimy surface of the insect and soon destroy them. The remedy is easy and effective.

Meteorological Diary for January, 1852.

The following abstract is taken from a Meteorological Journal kept latitude 32 degrees, and longitude 71 degrees West.

Day of month.	Height of Therm'r. at 7 a.m.	Course of wind	Remarks.
1	34° Fah.	N W	Cloudy
2	30 "	N W	Clear—heavy frost—ice $\frac{1}{4}$ inch in thickness.
3	28 "	N W	Hazy—white frost.
4	40 "	S E	Clear during day—storm at night, lightning, thunder and wind.
5	36 "	N W	Cloudy.
6	26 "	N W	Frost. Total Eclipse of the moon, visible from 11 to 5.
7	24 "	N W	Frost. Hazy in the morning.
8	32 "	S W	Cloudy.
9	36 "	S W	Clear.
10	48 "	N W	Clear.
11	28 "	N W	Clear—Frost.
12	27 "	N E	Cloudy—appearance of snow,
13	18 "	N W	Clear and cold.
14	16 "	N W	Clear and cold.
15	24 "	S W	Clear.
16	30 "	S W	Clear.
17	40 "	S W	Cloudy.
18	58 "	S W	Rain during the entire day.
19	10 "	N W	Clear—freezing all day.
20	6 "	N W	Clear—house plants all killed—ponds and lakes all frozen over, ice [thick enough to bear a wagon.
21	21 "	S W	Clear.
22	21 "	N W	Clear.
23	22 "	S W	Cloudy—Frost.
24	21 "	S W	Clear—heavy frost.
25	36 "	N E	Rain all day.
26	40 "	N W	Cloudy.
27	30 "	S E	Clear—slight frost.
28	31 "	S E	" with frost.
29	42 "	S E	"
30	53 "	S E	"
31	52 "	N W	"

Meteorological Notes for 1851.

Messrs. Editors.—Enclosed I send you an abstract from my Farm Book for 1851—a sort of meteorological milange, which may serve for copy when you are hard pressed for original matter. I could have added many interesting facts, but disliked to tax your good temper with deciphering one of Tony Lumpkin's "cramped specimens of penmanship," or to bore your readers upon a subject in which very few would take any interest, unless the moon had more to do with it. I do not believe that the clerk of the weather lives in the moon, or that this old daughter of Hyperion and Terra should be held responsible for all the freaks of the weather. Doubtless she is a great gossip—for among the very first things we remember to have been told in childhood was,

"And when the evening shades prevail
The moon takes up her wondrous tale,
And nightly, to the listening earth,
Repeats the story of her birth."

And what a tale she must unfold, if she adds but a tithe of the stories which have been told of her own doings, of the sights she has seen, and the sickly sentimentalities which have been spoken about her. Elicen jam satis.

BROOMSEDGE.

Big Branch, Union Dist., March, 1852.

Notes.

mo's. wind's course. no. days.

JAN	N. E.	13,	1 snow, 1 sleet, 4 rains.
"	S W	12,	without rain.
"	N W	3,	" "
"	W.	3,	" "

Fan clouds succeeded by a sudden fall of mercur-

ry, and the most violent snow storm I ever experienced. Circle round the moon followed by rain once, and not followed once.

FEB.	N E	14,	with 3 rains.
"	S W	12,	3 rains.
"	N W	3,	no rain.

Circle round the moon succeeded by rain twice.

MARCH.	N E	3,	three rains.
"	S E.	3,	two rains.
"	S W	20,	two rains.
"	N W	4,	one storm.

Fan clouds succeeded by fall of mercury and storms on two occasions.

APRIL	N E	9	four rains.
"	S E	5	three rains.
"	S W	7	one rain.
"	N W	7	frost and hail.

Fan clouds followed by fall of mercury and three times.

MAY	N E	5,	one shower.
"	S W	17,	two showers.
"	W	7,	one frost.

Fan clouds succeeded once by fall of temperature.

JUNE	N E	8,	one shower.
"	S W	22,	seven showers.

Fan clouds followed twice by sudden fall of mercury and storm. Circle round the moon followed by showers six times.

The S. W. wind sprang up about 10 A. M., and blew strong and hot all day—mercury above 90. The rains, or showers, very light. In recording rains, I call (in this abstract) any fall of

water a rain, and must not be understood that its fall was always at the place of observation, for all the rain that fell on my farm from May to August, would not have wet a man's jacket through.

26th June, first cotton bloom.

JULY Wind N. E. 6 days 1 shower.

" " S W 18 " 6 "

" " N W 7 "

Circle round the moon followed by rain on two occasions.

During this month, which was excessively dry (for the showers were very light, and rarely extending over an area of any extent or doing any service), the wind blew from the S. W. till noon, then sometimes veered to W. and N. W. The S. W. winds were very damp and catarrhs always prevalent. Thermometer 90 to 99.

AUGUST Wind N E 15 days, five rains.

" " S W 15 " six "

" " N W 1 "

Circle round moon followed by rain four times. Fan clouds followed by storm and fall of mercury.

September and October—absent. Fan clouds followed in October by the big frost.

Nov. Wind N E., 14 days, seven rains.

" " S. W. 10 days

" " N. W. 6 days, one rain.

DEC. Wind N. E. 10 days, one rain.

" " S. W. 7 " gulfwinds, damp.

" " N. W. 14 "

Fan clouds followed by sleet.

Suggestions for Agricultural Societies.

Whenever we contemplate the mighty consequences that improvements in agriculture have upon society in the aggregate, does it not behoove each and every one of us to assist in pushing this bulwark, not only of national greatness but of national independence itself, on towards perfection? Those who are interested in its progress—and who is not?—will unhesitatingly answer in the affirmative. Well, then, let all, both old and young, rich and poor, learned and unlearned, cast their mite in the common treasury, still digging for the hidden ore of truth, and soon will our old fields, some of which are covered with broomsedge and gullies, others, like Pat's bed, covered with *nothing*, disappear from the face of South Carolina, as if swept away by the wand of some powerful magician; and future generations will ask, where are those old fields so often mentioned and deplored by our ancestors? Echo will point to luxuriant fields, teeming with support for animated nature, and say, behold! these *were* they. But I will proceed to the object of this communication; it is, to make a few practical suggestions to Agricultural Societies on the most advantageous method of applying manures.

Now, I do not intend to attempt to inform practical farmers *how* to do this, but merely point them to the only true source from whence this information is derivable, and if they coincide with me, relative to this subject, all they then have

to do is, to obtain the information and apply it to practical life, with an assurance that success will crown their efforts. It is a well known fact to most men, that a certain vegetable is composed of certain ingredients, principles or elements, and that these elements must be contiguous to the vegetable whilst it is growing, or else that plant withers and dies, thus failing to fulfil its destiny, the production of seed; also, that the soil is the main fountain that supplies these elements; consequently if the soil does not contain these elements, it is the worst of folly to plant that vegetable in that soil—expending time and labor in the vain expectation of reaping a harvest.

I am well aware that the atmosphere furnishes important ingredients, both to the vegetable and animal world—but we can enhance its nutritive qualities by manuring it, as it maintains its proper condition independently of us; therefore let us turn our attention to the soil, where we can change, improve and create. To convey our ideas in a more explicit manner, we will assume a case: Wheat, for instance, is composed of gluten, albumen, starch, glucose, &c.—now suppose the soil does not contain these ingredients, either in a free or combined condition—would you sow your wheat in such a soil? We trow not. The same holds good of corn, cotton, potatoes, and all other vegetables we produce for our sustenance or luxury. Some reader, no doubt, is ready to ask, *how* are we to know whether our soils contain these ingredients or not? and how are we to ascertain the composition of our vegetables, with their glucose and other outlandish names you mention? Why, dear sir, as the English lackey would say, *that's hit, the very thing hitself*, yes, that is the point we wish to get at, and to carry this idea into practical use and benefit, we would recommend to all agricultural societies who are endeavoring to farm on scientific principles, to employ an agricultural chemist to analyze their soils, that they, thereby, may obtain beneficial information, and thus be enabled to employ every ounce of manure to the best possible advantage. This is not a mere chimera of the brain, a phantom of imagination, but it is a practical truth, one that has been subjected to the test of that infallible guide, experiment, and it is one, too, that in time will be the only method adopted in the application of manure. But some member of an agricultural society will object, first, these analyzers are not to be found in every community; and secondly, if found, they will not consume their time in instructing their neighbors how to manure, &c. To the first objection, we reply that, that community cannot be found in South Carolina, in which there is not some one tolerably well instructed in the general principles of chemical science, and also, by a little assiduous application, and confinement to analytical chemistry, would soon become competent to analyze soils with sufficient exactitude for practical purposes. If such a community exists, I warrant there is no agricultural society in *them diggins*, and whilst such a state of affairs continue there never will be one. To the second objection, we answer, the laborer is worthy of his hire—men are not

expected to work unless they receive a remuneration. Nature never designed that he should. Let agricultural societies appropriate funds sufficient to purchase material and instruments to experiment with—twenty or thirty dollars would make a good beginning—and let the planter pay him whatever the society may think a reasonable remuneration for each analysis he makes. By this procedure the farmer would be greatly benefited, and the analyzer would not expend time nor money unprofitably. Thus, Messrs. Editors, I have crudely sketched my ideas on the correct method of applying manures, hoping that some more competent person may treat this important subject in that thorough manner it evidently demands, so that agricultural societies may thereby be induced to test its practical utility.

Yours, most obediently,

GEO. W. DANBY.

ADVICE TO GARDENERS.—Don't let the insects of various kinds overrun your orchard or garden and then lazily fold your arms and say, "It's no use, this trying to raise things, that so many vermin are about." Spend three days industriously, in the early stage of the matter, in putting down the rascals, and then look around you and see if industry is not better than grumbling.

The Limited Duration of Varieties of Plants.

Since our article on this subject was written, the Horticulturist contains another from Mr. Townley, which the editor of that journal pronounces, not unjustly, one of the most interesting it has published. We have read the facts and argument of Mr. Townley with close attention, and see no reason to alter the judgment we ventured to express in our last. The question is not whether seedlings, plants, and trees propagated by buds, will deteriorate, for it is generally conceded that both will, but whether a healthy bud from an aged tree, having equal advantages of soil and climate, may not live as long and do as well on a *new tree*, as one grown from a seed from a tree that produced the bud? Here is an apple tree, itself a seedling, which is one hundred years old; and the question to be decided is, what advantages for the production of a new tree have its seeds over its buds? If the vital principle in its buds is feeble from great age, or a want of food, the same is true of its seeds. In cellular structure they are alike; and they are alike in composition and function after taking root in the ground.

How does it happen that seedling potatoes are subject to the rot as well as those grown from tubers, if the effect is confined to the propagation from tubers

instead of seeds? We found it impossible to answer this question to our own satisfaction, and hence we doubted the soundness of the "bud theory" altogether. Seedling onions, carrots and cabbages, often rot prematurely, especially so far south as Georgia. Indeed, they appear to decay there sooner than potatoes, even before carrots and onions are pulled. Had the plants produced from seeds, in starting new races of potatoes, been entirely exempt from the malady, while those cultivated from tubers were subject to it, such evidence would have gone far to show that nature had imparted less vital force to buds than to seeds. But, let seedlings be as long abused, in one form and another, as the tubers of potatoes and other plants have been, and also all fruits propagated by buds, and the seedlings so treated would show equal deterioration and proneness to early dissolution. It is better to have no theory at all on the subject of budded and seedling fruit trees, and esculent tubers, than one which, if not evidently erroneous, is more than doubtful. To improve all organic structures, all vital parts, one needs a knowledge of chemistry, anatomy, and physiology, in their application to the living beings whose constitutional vigor and enduring powers are to be changed for the better. Without considerable knowledge of the principles of organic chemistry, one cannot duly understand the relations that earth, air, and water bear to cultivated plants, fruits and animals; and without some acquaintance with their anatomy, some information in reference to the functions of their numerous organs, or their physiology, he cannot operate otherwise than in the dark in feeding his crops, his stock, and in improving his land. A man may produce, after a fashion, the flesh, bones and feathers, of one hundred fowls or turkeys in a yard, without the remotest idea of the elements which nature demands and consumes in their healthy growth. Empiricism or accident may have given him valuable information on the subject; but where we meet with one person who really understands the art and science of manufacturing eggs and poultry in the most economical manner, we find ninety-nine who have the trade to learn. So it is with fruit culture, potato culture, and grass culture.

Never, until farmers are willing to study the laws of nature which govern the organization, and the extension from generation to generation, of the plants

and animals which they labor to produce, can they make substantial progress in their profession. The intelligent reader knows how little has been done in the United States to foster the critical study of every department of agriculture and horticulture. We depend on Loudon, Knight, Lindley, Liebig, Johnston, Bous-singault, and other Europeans, for nearly all our knowledge of rural science.—Cannot original researches be made under a republican government as well as under monarchies?—*Genesee Farmer*.

Dwarf Fruit Trees.

A few years ago there was scarcely anything known about dwarf fruit trees in this country, but of late they have attracted considerable attention, and their character has become somewhat understood; but there are a multitude of persons who have very faint and incorrect ideas on the subject, and, therefore, although it may appear to the better informed class of cultivators a very superfluous undertaking at this time of the day, we are compelled to offer a somewhat minute explanation in justice to many whose claims we are bound to regard.

A dwarf tree, then, is a tree which by a certain mode of propagation and culture is reduced far below the natural dimensions; for instance, an apple, which if budded or grafted on a common apple stock, will make a tree twenty, thirty, or forty feet high, and as much in diameter, covering perhaps two or three hundred square feet of ground, will, if budded or grafted on a *Paradise* stock, (which is a dwarf species of the apple, attaining a height of only three or four feet,) never exceed four or five feet in height and as much in diameter, occupying little more ground than a gooseberry bush.—A dwarf pear, is a pear tree formed by budding on a quince, or some other small species of the pear family. Thus a pear which if budded on a common pear seedling, will attain thirty or forty feet in height, with a corresponding diameter, when budded or grafted on a quince or a thorn will not exceed twelve or fifteen feet, and may be reduced even to three or four feet by working on a *mesphilus*, a *cotoneaster*, or some very small growing species of the pear family or "alliance." So it is with other fruits, and the grand objects of dwarfing are—

First—To obtain small trees, adapted to small gardens, enabling the proprietor to enjoy a greater variety than he otherwise could.

Second—To obtain trees that will correspond in appearance with the enclosure in which they are planted.

Third—To obtain trees that will bear early, for dwarfing begets precociousness; and,

Fourth—To obtain trees that are low, easy of access in all parts, easily protected where protection is necessary, and not exposed to winds that would be likely to blow off the fruit or otherwise injure them.

These are the ordinary objects in view in dwarfing trees. But many suppose that a dwarf tree must, as a matter of course, produce dwarf, or proportionally small fruit. This is a great error, but one into which the inexperienced naturally fall. Dwarf trees, instead of producing small fruits, or those below the natural size of the variety, very often produce them larger. In another place we have given an account of a wondrous large apple grown upon a dwarf tree. This specimen was at least one-third larger than the average product of standard trees. We have had, the past season, *Red Astracans* on a three year old dwarf tree about two feet high, nearly twice the usual size on standard trees, and a little standard four year old tree of *Canada Reinette* that produced four extraordinary specimens, the largest one measuring over fourteen inches in circumference.—Nothing in all our grounds in the way of fruits, excited so much wonder as this, from the last of August to the first of November. The small size of the tree and the prodigious size of the fruit induced many to doubt the reality, supposing that some trick had been played, similar to the fastening of a gourd on an apple tree. As a general thing, where a variety does succeed on the *Paradise*, the fruit will be larger than on the free or common stock. So it is with pears—the largest specimens of *Bartlett*, *Louise Bonne de Jersey*, *Duchess d'Angoulême*, or *white Doyenne*, we have ever seen, were grown upon dwarf trees. The idea, therefore, that a dwarf tree must produce small fruit is just the reverse of the fact. At another time we may offer some remarks on the cause of this.

Some imagine to propagate dwarf trees it is necessary to take the scions from dwarfs. We have heard this notion advanced often, and in one case by a young nurseryman. There is not, perhaps, one person in ten thousand, however, but knows better than this.—Dwarfing is the result of budding or grafting on a particular stock, as we have already said, and it matters not whether we take our buds or scions from a dwarf or a standard tree, from one three feet or thirty feet high, the result will be the same, if the scions are in both cases equally healthy. We can also take buds or scions from dwarf trees and work them on common or free stocks, to produce standards.

In regard to stocks, there is one point on which even many intelligent cultivators are not well informed, and that is, the necessity of the stock and the scion being of the same natural genera, or alliance at least. Thus, the botanical order *Pomaceæ*, or *Appleworks*, as Lindley renders it, in the vegetable kingdom, embraces the apple, (*pyrus malus*;) the pear, (*pyrus communis*;) the Siberian crab, (*pyrus baccata*;) the quince, (*Cydonia*;) the medlar, (*Mespilus*;) the mountain ash, (*pyrus aucuparia*;) the thorns, (*cratægus*;) the *Amelanchiers*, of which our native shadblow is one; the *Photinia*, the *Cotoneaster*, &c. These have all strongly marked affinities, and may with more or

less success be budded or grafted upon each other. But the more nearly they are related—that is, the greater the congeniality in their natures, the more successful will be their union: thus, the pear will grow upon the apple, but much better upon either the quince, thorn, or mountain ash. But, if we should attempt to graft one of the species belonging to this order of the appleworks, (*pomaceæ*;) upon another belonging to the order *drupacæ* or "almondworks," [*Veg. King.*] we would be utterly unsuccessful, for these two have strongly marked botanical differences, and little or no congeniality of nature. We can never, therefore, graft apples, pears, or quinces, upon cherries, plums or peaches.

The order *drupacæ* or almondwort, alluded to, embraces all the species of almond, plum, cherry, peach and apricot. These have all certain prominent botanical similarities and affinities, and may all be worked upon with success proportionate to the strength of the affinity: hence the peach, apricot, almond and plum, in general grow upon one another perfectly well, but none of them can be worked to any practical advantage on the cherry. The genus *cerasus*, (the cherry,) contains many species, differing greatly in appearance; for instance, the *Mahaleb* and *Mazzard* are as distinct in general appearance of foliage and habit as an oak and a willow, yet they grow well on each other, because of a congenial nature.

We cannot at this time follow up these points, but we have drawn attention to them, and will add that those who aim at being an intelligent cultivator, should not fail to give it very attentive consideration.

Many people who have never seen dwarf trees, but order them from nurseries are quite disappointed when they see them. A tree two, three, or four feet high seems small to those who have all their lives been accustomed to large trees. They fear "they will never come to anything." We have seen people in search of dwarf trees, and yet ask the tallest tree in the row. Dwarf apples are of course very small when transplanted. A yearling will be from one to two feet, and at two years will be very little taller, but branched. Such diminutive things to the inexperienced are too small. One man says, "the dwarf apples are sprouts—not what I imagined them at all."—There is a much greater lack of knowledge on this subject than there ought to be, when books and papers that contain the remedy are so abundant and cheap. Young cultivators, think of these things during the approaching stormy weather and long evenings of winter.—*Ibid.*

TO PREVENT THE DEPREDATIONS OF WEEVIL.—Whoever will take the trouble to gather elder stalks and leaves, and put plenty of it among their wheat while mowing it away, will find it in a state of preservation at threshing time.—*Western Farmer*.

Good fences make good neighbors.

A Cure for Consumption.

Under this impressive head, we find in the first number of a new "Monthly Medical Register," lately commenced in New Orleans, a very plausibly written article by Professor Stone, of Louisiana, upon the virtues and efficacy of phosphate of lime, in serofula and some other depraved states of the system, which is of some moment. It was suggested by an essay in the "London Lancet" on the "philosophy and pathology of the oxalate and phosphate of lime, and their relation to the formation of cells."

"The conclusions of the author," says Prof. Stone, "are based upon careful chemical researches and results from the use of the remedy. His researches show that in a man, as well as in vegetables and inferior animals, phosphate of lime, as well as albumen and fat, is absolutely necessary to the formation of cells, and he considers that many of the pathological states of the system depend upon a deficiency of this salt. The affections in which it is advised, are ulcerations dependant upon a general dyscrasia, and not a mere local affection, and infantile anthropy, in those suffering from rickets and consequent diarrhœa and tuberculous diseases, particularly of the lungs in the early stages."

Struck by this article, Professor Stone tested it, and he thus describes three cases in which its virtues were very obvious. The first was that of a slave, who was admitted to the Professor's Infirmary in July, with a disease of the nose, the whole system showing progress in serofulous decay. The usual remedies were unsuccessfully applied until in August, when cod-liver oil was used, and the disorganization of the stomach was increased by it. The phosphate of lime was then applied, eight grains three times a day. Its effects were soon apparent. It and the oil were soon administered together and the patient was soon restored to health.

The second case is that of a young lady, aged twenty-four years. Her disease was one of "unmixed phthisis," which had been expected to terminate fatally in the course of a few months. The upper part of both her lungs was filled with tubercles, and in some places were beginning to soften. The case was evidently a bad one. The treatment of cod-liver oil was at first used, but without marked improvement. The phosphate of lime was then administered with the oil, and the result, as in the case of the negro, was soon apparent. The patient was

rapidly getting well. The third case was that of a child, seven years of age, in which phosphate of lime was used with complete success. We can only refer briefly to these cases, for the purpose of directing attention to the subject. Before the dreadful diseases which they describe, scientific men have stood abashed. That there *may be* some remedy for them we can hardly doubt; and this may, if a new thing, be the desideratum which science is in search of.

Of course, the hundreds of our people who are afflicted with the terrible threatening symptoms of these diseases, would avail themselves of the remedy proposed, could they hope for any relief from the hints above named. And the Worcester Spy, after republishing this article, adds the following paragraph to it.

"On the appearance of this article a friend of ours addressed a letter to a professional gentleman of high standing, in New Orleans, who is known throughout the Union, making inquiries respecting it. The answer is of a highly satisfactory character. The writer says that Professor Stone is an eminent physician, and in fact, stands at the head of the medical profession in New Orleans. Dr. Stone says there *can be no doubt* of the usefulness of the new remedy. The phosphate of lime should be incorporated with the cod-liver oil, in doses from six to eight grains of the phosphate with more or less of the oil, according as the stomach of the patient is able to bear it, and be taken every morning, noon and night. This comes from a source that entitles it to the consideration of the medical profession."—*New England Cultivator*.

Proposed Remedy for Deafness.

What will not a person who is so unfortunate as to be "hard of hearing" try, by way of remedy, for deafness? It is a terrible affliction, and we have a friend who has experimented with one half of the doctors and quacks in this neighborhood, in his attempts to obtain relief from this trying misfortune. A Mr. S. W. Jewett has lately sent the following to an exchange, and vouches for its efficacy. We publish it for the benefit of the afflicted, and is so simple that a trial of *this* experiment, in similar cases, can certainly do no great harm to the patient:—

At about three years of age, a daughter of the Hon. Daniel Baldwin, of Montpelier, became very deaf in both ears. — In conversation it was quite difficult to make her hear, and she continued in this wretched state until about eighteen years

of age, when an Indian doctor chanced to see her, who told the mother, Mrs. B. that the oil of onion and tobacco would cure her if prepared as follows: Divide an onion, and from the centre take out a piece of the size of a common walnut; fill this cavity with a fresh quid of tobacco, and bind the onion together in its usual shape; roast it, then trim off the outer part until you come to that portion slightly colored or penetrated by the tobacco; mash up the balance with the tobacco and put it into a phial. Three drops of this oil, Mrs. B. informed me, she dropped into her daughter's ear after she had retired to bed, which immediately gave her considerable pain which lasted some time. Before morning, however, her hearing was so extremely delicate and sensitive, that she suffered by the sound and noise of common conversation! This she soon overcame, and for more than three years past her hearing has been entirely restored, to the great joy of her parents and friends. Having been acquainted with the family for many years, the case is so miraculous and gratifying, that I cannot, in justice to the afflicted, refrain from making this simple and effectual remedy for deafness known. —*Ibid*.

TO CLEAN MARBLE.—Mix well together strong soap lye and quick lime, until they appear like milk, and then lay on the marble for twenty-four hours: then clean it off. The color may afterwards be improved by polishing with fine putty powder (whiting,) and olive oil.—*Ex*.

Wood ashes and common salt, wet with water, will stop the cracks of a stove, and prevent the smoke from penetrating.

TO PREVENT BOTS IN HORSES.—A person of much experience in veterinary science is never troubled with this disease in his horses. His simple practice during the fall months, is to keep a greasy cloth in the stable, and once a week rub with it such parts of the animal as may have been attacked by the nit-fly. Grease destroys and prevents the eggs from hatching.

FOR YOUR CATTLE AND HORSES.—Mix occasionally one part of salt with four parts of wood ashes, and give the mixture to different kinds of stock, summer and winter. It promotes their appetites and tends to keep them in a healthy condition. It is said to be good against bots in horses, murrain in cattle, rot in sheep,

Corn Crib.

We had the pleasure of giving to our readers the plan of a model smoke house in our last, which is noticed under the editorial head in the present number. We are now gratified to have it in our power to give a description from our excellent exchange, the Southern Planter, of a Corn Crib by the Rev. W. Timberlake of Virginia. The plan of which is undoubtedly superior to the very best usually seen in the South. In the language of the editor, "we thank Mr. Timberlake for the favor he has done us personally, as well as to every farmer young or old who wants a corn house." Intending to construct one in place of our old and unsightly pile of logs, we have for some time past been looking through our exchanges for a plan to suit us. We have at length found it, and may, with Pythagoras in his discovery of the 47th problem of Euclid, cry out "eureka."

The editor cautions farmers not to permit "smart" workmen "to improve upon it," and says, Mr. Timberlake, who is a very experienced builder, has erected or superintended the erection of a good many, and the present plan is the result of his pretty extensive experience. We have seen and carefully inspected his two cribs and know them to be first rate."

MR. EDITOR:—Agreeably to your request I proceed to try and answer some of the queries of your correspondent, "Yadkin." I am not prepared to furnish a neat plan or drawing of any building, but will endeavor to give such a description of my corn crib, as will enable him to erect one like it, if he thinks proper.—And I may add some general remarks on other farm buildings, which may serve as a foundation for reflection; and when I have more time, I may, if desired, give a description of my stables, and farm pen for saving manure, and also say something of curing pork.

I will first give the size of my corn cribs, and then a bill of timbers to erect one, and then describe the manner of building it.

Dimensions.—Forty by twelve feet from out to out. Ten feet pitch. Roof projecting three feet from side and ends.—Raised two feet six inches above the ground, which makes it rat-proof, as mine has been for six years. It has a passage or entry in the middle twelve by twelve feet, for shelling corn. The two apartments for corn when well filled will hold about one hundred and fifty barrels each.

Bill of Timbers.—All of as durable quality as can be had.

Four corner posts thirteen and a half feet long, twelve inches square.

Two side sills forty feet long, twelve inches square.

Two end sills twelve feet long, twelve

inches square.

Two side plates forty-six feet long, seven by five inches.

Two end plates twelve feet long, seven by five inches.

Two extra end plates, *to be notched on the ends of side plates*, twelve feet long, five by three inches.

Eight braces and two door posts, ten feet long seven by five inches.

Studs two feet apart three by five inches. Less substantial ones will spring.

Rafters three feet apart, twelve feet long, three by four inches; forming a square roof, and extending three feet below the plates.

Sleepers (round pine preferred) two feet apart, hewed straight on the upper side, and flattened at the ends to six inches diameter.

Four short posts, or legs, three feet long, twelve inches square, to be let in under side sills.

Flooring plank, inch and a quarter thick, any width—length to suit.

Sheeting, plank and shingles.

Framing.—Unlike most houses, the corner posts rest on the ground. Mortise side sills into corner posts, two and a half feet from the lower end, with a bearing of two inches in the posts to aid the tenons.

Mortise for two short posts, or legs, in side sills at equal distances, to support side sills, as nearly all the weight is on them.

These supports under the sills together with the corner posts form eight legs to the crib.

Mortise end sills in corner posts, with out any bearing; the top to be six inches above the top of side sills to correspond with the sleepers.

The sleepers must be laid on the sills and extend to outside. But they must be larger than any of the others, and squared at the ends to eight inches. Each of these should be let into the side sill six feet from the centre of the house each way, with a dovetail two inches deep and pinned, to keep the sills together.—These large sleepers should be under the portions forming the passage; and there must be similar pieces let into the plates above them in the same way, to keep them together. The side braces are to be put up square, and the end braces are to extend higher up the corner posts than the side ones so as not to cut away too much of it at one place. And both are to be let into the sills and corner posts two and a half inches with a dovetail extending quite across posts and sills, pinned

with an inch and a quarter pin, and a large spike nail driven into each. These are much stronger than a mortise and tenon for braces. And I go for strength.

The side plates must be let on the corner posts by mortise and tenon; they must project three feet over at each end, and an extra end plate, three by five inches, must connect with the ends of side plates, and have shiplapped upon it small hanging studs to bring the end extensions down as low as the eaves of the covering; and above should be studded in the usual way, and planked, in place of weatherboarding, with inch or three-quarter plank edge to edge.

The end plates proper should be mortised into the corner posts, so that the top shall be level with the shoulder, forming tenon for side plates, and pinned well to hold the posts together. (From these to the extra plates I lay floors to put my seed corn in.)

The studs are to be mortised into the sills between the sleepers, two feet apart, with a good tenon; bearing in mind that strength is necessary here, because of the side pressure. A hole should be bored with a small auger from the bottom of the mortise to come outside of the sill to let the rain water out.

The flooring should be laid close with inch and a quarter plank, and one or two planks nailed on inside immediately around the house to keep in shattered corn. The partition too, at the bottom, be sealed inside close, except a space of three feet which is used as a door, in the middle on each side. And as I put the corn in, when necessary I begin to put in short planks three feet two inches long in a rabbit left for the purpose. And as the corn rises I continue these short planks to the top, and then if necessary I can carry corn over the partitions. In like manner as I use the corn I take out a plank at a time until I reach the bottom. Hence I have no occasion to go on my corn with muddy or dirty feet, which injures and shatters it very much. As I take the corn down in front it runs to me until I get to the floor, when I can go in without injury to the corn.

The entire inside of the corn crib above the bottom planks is to be latticed with slats four by one inch, and nailed on an inch and a half apart for ventilation.

My door opens on the outside, and I enter at the passage or shelling room, by way of a short block as a step; but, if preferred, steps can be constructed like the steps of a carriage, to let down—and

then the door cannot be shut until the steps are put up.

The legs of the crib should be set on broad, solid, flat rocks; and if they are not to be had, then on pieces of timber hewed on two sides to eight or ten inches, and laid firmly on the ground, and reaching quite across the house, so that the legs on opposite sides can sit on one piece. As these decay they can be replaced when the house is empty.

Last of all, but not the least important, I sprig on sheet tin on each leg of the crib, up us near the side sills as I can, but not on them. These sheets of tin must go entirely around, taking off a little of the sharp edge of the post first. I am cautious not to let the tin meet on the corner or edge of the post, but in the middle of the flat part. Else I may form steps for the rats, as they always attempt to go up the corners. By putting the tin so high up the rat is in the act of climbing before he reaches it, and then he can't leap over it.

The cost of such a house, all told, would be here from eighty to one hundred dollars. But as I work, it costs about sixty-five dollars.

I have said so much about a corn crib that I have no room to say more at present. But I will remark that, in locating our farm buildings reference should be had to one fact: that is, that in this section we seldom have strong east winds in dry weather. Hence all chimneys to servants' houses, kitchens, &c., should be placed at the east end; and we should look well to the contiguity of such houses to farm buildings where there is danger of fire.

"Yadkin" asks for a plan of a stable, a portion to be allotted to farm horses and a portion to carriage and saddle horses. *First.* I remark, I should like to have the latter nearer my dwelling than the farm stable. And, *second:* Experienced Virginians know that farm servants seldom agree. Their relation to each other genders a principle of envy and hatred. And even if they *could* agree, if there is an overseer on the farm, he must be one of many if he would not seek to get hold of those "gentlemanly house servants," as they are sometimes called. Hence the arrangement in my opinion would not answer. Such has been often made and necessarily changed afterwards.

Respectfully, W. TIMBERLAKE.
Belle Air, Albermarle, Oct., '51

Eight table-spoonfulls are one gill.

Comparative Value of Grains.

Professor Norton, in his "Elements of Scientific Agriculture," gives us the following interesting suggestions in reference to the comparative value and nutrition contained in different kinds of grains.

Wheat, he says, is one of the most important of all crops. The grains contains from fifty to seventy per cent. of starch, from ten to twenty per cent. of gluten, and from three to five per cent. of fatty matter. The proportion of gluten is said to be largest in the grain of quite warm countries.

It is a singular fact that, in all the seed of wheat and other grains, the principle part of the oil lies near or in the skin, as also does a large portion of the gluten.—The bran owes to this much of its nutritive and fattening qualities. Thus, in refining our flour to the utmost possible extent, we diminish, somewhat its value for food. The phosphates of the ash also lie, to a great degree, in the skin.—The best fine flour contains above seventy pounds of starch to each hundred.—The residue of the hundred pounds consists of ten or twelve pounds of water with a little oil.

Rye flour more nearly resembles wheaten flour in its composition, than any other; it has however, more of certain gummy and sugary substances, which make it tenacious, and also impart a sweetish taste. In baking, all grains, and roots which have starch in them, a certain change takes place in their chemical composition. By baking, flour becomes more nutritious, and more easily digested, because more soluble.

Barley contains rather less starch than wheat, also less sugar and gum. There is little gluten, but a substance somewhat like it, and containing about the same amount of nitrogen.

Oat meal is little used as food in this country, but it is equal, if not superior, in its nutritious qualities, to flour from any other of the grains; superior, I have no doubt, to most of the fine wheaten flour of the northern latitudes. It contains from ten to eighteen per cent. of a body having about the same amount of nitrogen or gluten. Besides this, there is a considerable quantity of sugar and gum, and from five to six per cent. of oil or fatty matter, which may be obtained in the form of a clear, fragrant liquid. Oat meal, then, has not only an abundance of substance containing nitrogen, but is also quite fattening. It is, in short, an

excellent food for working animals, and, has been abundantly proved in Scotland, for working men also.

Buckwheat is less nutritious than the other grains which we have noticed.—Its flour has from six to ten per cent. of nitrogenous compounds, about fifty per cent. of sugar and gum. In speaking of buckwheat or of oats, we of course mean without husks.

Rice was formerly supposed to contain but little nitrogen; but recent examinations have shown that there is a considerable portion, some six to eight per cent. of a substance like gluten. The percentage of fatty matter and of sugar is quite small, but that of starch larger than any other grain yet mentioned, being between eighty and ninety per cent.; usually about eighty two per cent.

Indian corn is the last of the grains we shall notice. This contains about sixty per cent. of starch, nearly the same as in oats. The proportion of oil and gum is large—about ten per cent.; this explains the fattening qualities of Indian meal, so well known to practical men. There is besides, a good portion of sugar. The nitrogenous substances are also considerable in quantity—some twelve or sixteen per cent. All these statements are from the prize essay of Mr. J. H. Salisbury, published by the New York State Agricultural Society. They show that the results of European chemists have probably been obtained by the examination of varieties inferior to ours; they have not placed the Indian corn much above buckwheat or rice, whereas, from the above, it is seen to be "in most respects, superior to any other grain."

Sweet corn differs from all other varieties, containing only about eighteen per cent. of starch. The amount of sugar is of course very large; the nitrogenous substances amount to the very large proportion of twenty per cent.; of gum, to thirteen or fourteen; and of oil, to about eleven. This, from the above results, is the most nourishing of all crops grown.—If it can be made to yield as much per acre as the hardier varieties, it is well worth a trial on a large scale.—*Boston Cultivator.*

Lampas.

The lampas is a name given by writers on farriery to a swelling, or unnatural prominence of some of the lowest ridges or bars of the palate. I should not have thought it worth while to have taken up time with this *supposed* malady, but that it has called forth the infliction of great torture on the animal by way of remedy,

and that it has been a cloak for the practice of much imposition on those who have been in the habit of consulting farriers on the diseases of their horses. I allude to the cruelty and barbarity of burning the palates of horses so affected: equally consistent would it be, and, were it consistent, more requisite, to cauterize the palates of children who are teething; for the truth is, that the palate has no more to do with the existing disease (if disease it can be called) than the tail has. Lampas is no more or less than a turgidity of the vessels of the palate, consequent upon that inflammatory condition of the gums which now and then attends the teething process; but notwithstanding this plain and simple truth, the horse continues to be persecuted for it, even by some professional men as well as farriers. The practice is a stigma upon our national character, and a disgrace to the professors of veterinary science.

Teething in children is now and then a season attended with restlessness and pain; and was one, before surgeons were in the habit of using the gum lancet, of anxiety and danger; but it is not so with horses; they never have any feverish irritation created in the system, though they may have some tenderness of the gums and palate, and though some few, in consequence of this tenderness, *cud* their food, or refuse to eat any but what is soft and unirritating. In such a case, if anything requires to be done, we ought to lance the gums, not the palate; but I do not remember ever to have had to do this but once; and this happened in the case of a horse, then in his fifth year, who had fed so sparingly for the last fortnight, and so rapidly declined in condition in consequence of it, that his owner, a veterinary surgeon, was under no light apprehensions about his life. He had himself repeatedly examined the horse's mouth without having discovered any defect or disease; but another veterinary surgeon, to whom he had shown the animal was of the opinion that the averseness or inability manifested in masticating food, and the consequent *cudding* of most of that taken in, arose from a preternatural bluntness of the face of the grinders; these teeth were therefore filed, but no benefit resulted. It was after this that I saw the horse, and must confess that I was just as much at a loss in my first examination, to offer anything satisfactory on the case, as many others then present, for his teeth and mouth appeared to us all to be perfect and healthy. As I was ruminating on the apparently extraordinary nature of the case, it struck me that I had not seen the tusks. I immediately betook myself to a re-examination, and then discovered two little tumors, red and hard, in the situations of the posterior tusks, which, when pressed, appeared to give the animal insufferable pain. I instantly took a pocket knife and made crucial incisions through these prominences down to the teeth, from which time the horse recovered his appetite, and was restored. Our own definition of lampas is, that in the young subject there is relaxation of the mucus

membrane of the mouth, accompanied by turgescence and pain. In the aged subject, the membrane is corrugated, thickened, and is scarcely, if ever, attended with pain.

Treatment.—If the colt's mouth is hot and tender, keep him on scalded food; to which add, night and morning, one tea-spoonful of cream of tartar, and one ounce of powdered poplar bark. The mouth may be washed night and morning with an infusion of hops, to which a handful of the leaves of *hamamelis Virginica* (white hazel) may be added. When the lampas makes its appearance, after the temporary teeth are all shed, astringent and tonics are indicated. The following is a good example: Powdered bayberry bark, one ounce; powdered golden seal, one half ounce; boiling water, one quart. When cool is fit for use, and may be applied to the roof of the mouth two or three times a day by means of a sponge. It sometimes happens that this corrugated state of the membrane is occasioned by debility; in such cases the general health of the animal must be improved. The following article will be found effectual: Powdered prickly-ash bark, two ounces; snakehead, one ounce; poplar bark, two ounces; blood root, one ounce; anise seed, two ounces; sulphur one ounce. Mix and divide into eight parts, one of which is to be given night and morning in the food.—*Veterinary Journal*.

The Pleasures and Advantages of Labor.

There is a very false notion in the world respecting employment. Thousands imagine that if they could live in idleness, they would be perfectly happy. This is a great mistake. Every industrious man and woman knows that nothing is so tiresome as being unemployed.—During some seasons of the year, we have holidays, and it is pleasing on these occasions to see the operative enjoy himself; but we have generally found that, after two or three days of recreation, the diligent mechanic or laborer becomes quite unhappy. He sighs over the wretchedness of being idle. The fact is, we were made to labor, and our health, comfort and happiness depend upon exertion. Whether we look at our bodies or examine our minds, everything tells us that our creator intended that we should be active. Hands, feet, eyes, and mental powers show that we were born to be busy. If we had been made to be idle, a large portion of our bodily and mental faculties would be redundant. Sir Cha's Bell has exhibited the wonderful structure of the human hand; other physiologists have entered into a minute description of our bodies generally, and have displayed their wonderful adaptation for the business of life. Metaphysicians, also, have dilated on the mind and its operations, and have brought forth to view its marvellous powers, demonstrating that man was intended to be lord of this lower creation. But then all depends upon labor. There are the same mind and body in the savage that haunts the wilderness; the gourmand that merely

eats, and drinks, and sleeps; the lady that lounges on the sofa and boasts that she never does anything, nor ever wets her fingers; and the myriads of active hands and hearts that change the desert into a paradise, and furnish it with all the comforts, enjoyments, and luxuries of life. Industry and toil make all the difference between the useless and the useful. Did the world consist of ladies, we should be starved, famished and poisoned; or did it contain none but gentlemen unfit for manual labor, we must all perish for want of the common necessities of life. A world of kings, lords, Alexanders, Cæsars, Calligulas, or Jezebels, would soon leave the globe without an inhabitant. Exertion, activity, study, and toil, all properly directed to some useful end, are the great requisites of every age and country. Give us these, and we can very soon have a happy, a prosperous, an enlightened and a refined era.—*Exchange*.

Poultry Houses near Horse Stables.

FRIEND MOORE:—I noticed in a late number of the Rural, in an article from the Germantown Telegraph, that a writer recommends building hen houses behind or adjoining horse stables, in order that the manure might be thrown in for the fowls to scratch and work over.

Now so far as throwing in the manure is concerned, I agree with the writer; but if farmers or fowl fanciers wish to rid themselves or their horses of an almost everlasting pest, by all means let them keep their hen roosts away from behind or adjoining the stable. I can speak from experience in this matter; and there are those about here of my acquaintance who can bear testimony to what I have stated. Yes; keep your hen houses at a distance from horse stables. And, for the benefit of those who desire it, I will briefly give my reasons for making the statement. During the early part of my keeping fowls, I had their roosting place adjoining the stall where I kept my horse, with a partition between. I think it was the second year after I kept my hens in this manner, that I discovered there was something the matter with my horse. He showed a disposition to rub and bite himself; but for a long time I paid little regard to it, thinking he would soon be over it, but it seemed to increase upon him. I could fit up no stall nor partition of sufficient strength to resist his efforts. I could leave him nowhere unhitched; and if I hitched him he would soon break loose and get to some place where he could rub. For six months or more he continued in this manner, before I ascertained what ailed him. I tried various remedies for humor in the blood—bled him copiously—drenched

him with physic till he could hardly stand; and all to no effect. He was a large and valuable horse commonly, but at this stage of matters he was truly a sight to behold. He was minus his mane, and was nearly in the same condition with his tail; his sides lacerated and naked in consequence of his continual rubbing and biting. At last the thought struck me that the animal might be *lousy*; and, on close examination, I found that he was literally covered with small hen lice, and they adhered so closely to the skin, that it was almost impossible to comb out one with a fine comb. I changed my course of doctoring, and by dint of perseverance, through the application of various remedies for the destruction of lice, in the course of six or eight weeks I succeeded in effecting a perfect cure.

The first thing I did after this was to remove my hen roost, and scald and whitewash my stables. I have not been troubled with hen lice getting on my horse since. I have heard of similar cases, where horses have been afflicted in the same way; hence I consider it safest not to build a hen house behind the stable.—*Rural New Yorker*.

REMARKS.—We have known the most distressing effects on the horse from the cause above stated—allowing fowls to roost in the stable.—Indeed, when we first read the above article, we were almost ready to conclude it had been written by one of our neighbors whose horse was similarly effected and treated, for several months of the past year, before the true cause was discovered. We have but little doubt that many horses in our country are annually physicked and bled for “a humor in the blood,” when laboring under the irritating annoyance of hen lice only.

[Eds. F. & P.]

USEFUL DOMESTIC RECEIPT.—To detect arsenic in candles, take a piece of gold coin or a gold dollar or sleeve button and suspend it over the flame of a candle (one or two inches above) taking care not to make the metal anything like red hot. After being thus suspended for a few minutes, cool and rub the piece, and the sublimated arsenic will be found deposited on the polished surface of the gold. It will be amalgamated with it, and exhibit a white metallic lustre, like inferior silver plate. It is well known that arsenic is used very extensively in the manufacture of all or most of the various sorts of *hard composition* candles, whatever name they assume. The community ought to have some protection against this mode of disseminating poison.—*Ex.*

Comparative Expense of the Horse and Mule to the Farmer.

MR. EDITOR.—For the last four or five years I have devoted my time mostly to

farming, and during that time have paid a good deal of attention to the feeding of my horses; and, therefore, have learnt pretty well the expense of keeping that animal on the farm. I have long since come to the conclusion that the mule would be much cheaper as a working animal on the farm than the horse, and have therefore determined, as soon as I can dispose of my horses without two much sacrifice in price, to procure a full team of them, and use them in all my farming operations. When I take into consideration the very great saving to the farmer by the use of the mule instead of the horse, it is a matter of great surprise to me that our improving and intelligent agriculturists should have delayed a thing of such importance as this, to this time. I can only account for it in this way—that, until within a few years past, there has been no accessible market for our surplus corn, and, therefore, it was not considered expensive to feed it away lavishly to horses; and thus having become accustomed to the horse and this wasteful mode of feeding him, our farmers have come to regard it as all right and proper. But we are now placed under very different circumstances. Canals, plank roads and rail roads now offer facilities to various markets for our surplus grain of all kinds; and to continue now the old, extravagant, and wasteful habits of feeding it away to horses, when a ready market and remunerating prices are offered us, is, to say the least, very bad management—management decidedly behind the times.

But a change in this respect has commenced. Some of our practical and sagacious farmers have commenced the work of reform; have dispensed with the horse, and supplied themselves with mules. Some of these have assured me that they were much pleased with the exchange; so much so that they would advise their friends to give away their horses, if they could not sell and purchase mules.

I propose now, Mr. Editor, to give you a calculation in figures of the saving to the farmer by the use of mules instead of horses; and for that purpose I will take a team of ten for a period of twenty years; will suppose the horse to cost at the purchase the same price, and will estimate the difference, saved in feeding of the mule, of Indian corn, at six barrels each per annum, to keep them each in good working order.

Upon that data I make this exhibit:

10 horses will consume each 12 bbls. corn per annum, say for 20 years, which is equal to 2400 bbls., worth on an average, \$2.50 per barrel,	\$6000
Shoeing 10 horses will cost \$30 per annum, (\$3 each, or more, which we have to pay,) say for 20 years,	600

Cost of feeding on corn and shoeing 10 horses for 20 years,	\$6,600
10 mules will consume each 6 bbls. corn per annum, say for 20 years, which is equal to 1200 bbls., worth on an average \$2.50 per barrel—no expense of shoeing,	\$3000

Am't. saved in 20 years by mules, 3600

According to this estimate we have the surprising sum of \$3600 in 20 years, or about \$200 per annum, gained or saved by having mules instead of horses; but large as this sum is, it can be fairly augmented to upwards of \$4000, by taking into the calculation the greater longevity and exemption from disease of the mule, which items are not set down in the above statement. At the end of 20 years, how will the matter stand? In all probability, the horses will all, or nearly all, be dead, while the mules, we may reasonably suppose, if not very badly treated, will all, or nearly all, be living, and be good for service for some five or ten years longer.

I am, therefore, Mr. Editor, the warm advocate of the mule. Mules have been scarce and high for several years, and I have thought it a good plan to get some large mares and raise from a large jack. They can be raised at a very trifling expense, and are ready for work at an early age. I have already commenced raising, and have two now for a beginning.

If my estimate approximate to reality on this subject—and I feel great confidence it does—then it is a matter of grave importance to the whole agricultural community that they should bestow some attention to a matter which so largely concerns them.

That the mule can do as much and as efficient work as the horse, I think there is no doubt, especially if the mule have size and weight which should be the case. Three good mules will draw a three horse plow, and do as good work as three horses, and in the heat of summer fallow, which is fatal to so many horses, you never hear of any injury to the mule.

I have been for several years, Mr. Editor, an attentive reader of your very valu-

able journal, and have derived much pleasure and profit from it; but I have never seen an article in it on this subject. I should like to see it discussed and examined. I would be pleased to have the views and opinions of others, who have more experience, and if my ideas upon the subject are wrong, I would like to have them corrected.

[*Cor. Southern Planter.*]

TO MEND IRON POTS.—A writer in the *Scientific American* gives the following mode:

Take two parts of sulphur, and one part, by weight, of fine black lead, and put the sulphur in an old iron pan, holding it over the fire until the sulphur begins to melt, when the black lead is added, stirred well until all is mixed and melted, and then in its molten state the compound is poured on an iron plate or a smooth stone. When it has cooled down it is very hard, and is then broken in small pieces. A quantity of this compound is placed upon the crack of the iron pot to be mended, and by a hot iron can be soldered in the same way a tin-smith solders his sheets. If there is a small hole in the pot, it is a good plan to drive a copper rivet in it, and then solder it over with this cement. I know a person who mended an iron pot by the above plan upwards of twenty years ago, and he has used it ever since.—*Ex.*

PRINCIPAL CAUSES OF DECAYED TEETH.—1st. Uncleanliness. 2nd, Taking food into the mouth of an unnatural temperature. 3rd, The abuse of acids. 4th, The use of pearlash or saleratus in bread or other food. 5th, Fevers and many kinds of medicine. It is useless to travel the world over to find pure air, if the breath is contaminated by diseased teeth and gums. The loss of the teeth causes imperfect mastication; consequently the food is swallowed in chunks and causes dyspepsia or painful digestion. The teeth should be cleansed by picking and brushing, after eating most kinds of food now used in civilized society. Chewing tobacco wears away or destroys the crowns of the teeth. Nature designed that the teeth should be perfect, like the fingers; and doubtless they would be, if they were cleansed as often. If people would usually take as much pains to clean the inside of their faces for their own health and comfort as they do the outside to gratify the sight of others, they would have better and less decayed teeth.

All kinds of washes advertised to dissolve or remove the tartar of the teeth are either ignorant or base impositions upon the public. It should be carefully removed by instruments designed and suitable for the purpose; and afterwards keep off with a tooth brush and suitable dentrifice. Filing teeth, or repairing them, is of essential importance, and from which much benefit will be derived if properly done and at a suitable time.—when the natural teeth are gone, artifi-

cial ones are often used in eating, and are very useful in speaking, having a tendency to lengthen life, as they relieve the lungs of much unnatural exertion, which produces irritation, and consequently languor. In general, people do not allow themselves time to clean their teeth, and it is lamentable that the health and comfort of many are sacrificed to their business, or to acquire unnecessary wealth. Most operations on the teeth, except extraction, are not necessarily painful.

Cultivation by Steam.

An interesting article was published in the *Cultivator*, from the *Ag. Gazette*, on the proper method of applying steam to the purposes of tillage. The author of that article has written several others on the same subject, which have appeared in the journal before mentioned, one of which contains the following ideal description of the machine which he supposes is destined to take the place of the common plow:—*Alb. Cultivator.*

"Before you depart this life, you will see one more wonder moving upon the face of the earth, something of this form and fashion—to wit: A complete locomotive engine on four wheels, with tires ten inches broad, and slightly corrugated cross-wise on the face, the front wheels turning on a transome, the hind ones fixed; behind them (suspended) a transversed, cylindrical shaft, three feet in diameter, from six to eight feet long, reminding you of a cross-breed between a elod crusher and hay tedding machine, armed with case-hardened steel tine-points, in shape like a dog's elaw, each tine-point alternately long and short, so that the side-lap of each elaw may cover the work of the other, and no interval or ridge be left unrent: the extremities of the cylinder just covering the wheel tracks. This formidable cylinder of elaws, you will see raised or depressed at pleasure by the engine driver, and adjusted to slow or rapid revolutions, not worked by clog-wheels, but by one of the new metallic bands geared from the drum of the engine. That is, the 'Cultivator.'—A platform from the engine extends over it, ending in a sort of movable-tail board, which may be raised or depressed at pleasure, to regulate the the settlement of the soil which seatters from it. The revolution of the cylinder is not *against*, but *with* that of the wheels, not dragging or retarding, but helping the advance of the whole machine, which is moved slowly forward (about a half a mile an hour) by a detached force of about two horsepower, from the same engine."

TO DESTROY LICE ON HOGS.—Sulphur, mixed with lard and applied externally, will, without doubt, cause them to leave, provided they are not too much reduced, but if they are, a repeated washing in fish brine would be preferable.

Your, respectfully,

RED OAK.

EDITORS' TABLE.

AGENT FOR THE FARMER AND PLANTER.—We have recently appointed Mr. H. P. DOWTHET, of Tuscaloosa, Alabama, our agent for procuring subscribers to the *FARMER AND PLANTER*, in Alabama, and other States, in which he may travel. He is authorized to make collections and to give receipts for the same.

SEABORN & GILMAN.

Acknowledgments.

We have received from a friend a drawing and description of a sub soil plow, which shall appear as soon as we can have an engraving prepared.

We take pleasure in acknowledging our obligations to the Commissioner of Patents for a very acceptable package of seed from the Patent Office. Some of which we have distributed among our friends, whilst others have been committed to mother earth with the hope of being able to make from them a more liberal distribution to our subscribers another year.

Our thanks are also due to Prof. Mapes, for a paper of his celebrated Soft Corn. We will give it a fair trial and report progress.

We welcome to our columns the contributions of several new correspondents, in our last and present number. Will others follow their example? All communications for the columns of the *Farmer and Planter*, should be sent in by the first or middle of the month preceding the one for which they are intended—for instance, an article for the month of May, should be in hand by the first or middle of April. Many communications are received so late in the month, that they have necessarily to lay over, contrary to the wishes of the writers.

Our readers have no doubt been pleased, on receiving our last number, to meet again with our old friends and able contributors, "Broomsedge," and "T. E. Blount." We admit, with Broomsedge, that we would be about as well employed in "patting juber to a mile stone" as in urging on our popularity-seeking representatives, the propriety of a tax on dogs, unless we can first induce the "dear people" to move in the matter. A few more such knock down facts as set forth in his article, if we could place them in the hands of the people, would, we think, have a more salutary effect than any thing we could say directly to legislators.

In his excellent article on the management of sedge land, which we highly approve, situated as he is in the marl region, our friend T. E. Blount differs from us "in regard to burning off sedge on light soils." We recommend burning for the very reason that we have neither marl, lime, nor ashes to apply to the land—whilst our friend would not burn because he had an abun-

dance of the former at hand, and *with it* he is fully able rapidly to carry on his system of improvement. But few of our readers, especially those who are under the necessity of reclaiming sedge land, have it in their power, on living terms, to procure marl or lime for agricultural purposes. They are consequently under the necessity of adapting their course to their means of improvement. Hence we recommend the application of ashes, even the small quantity left in burning a sedge field, as the first step towards its renovation—especially on light lands requiring to be rendered more compact and retentive of moisture.

SMOKE HOUSES.—We neglected in its proper place to return our thanks, in which we are sure Dr. R. L. N. will join us, to our worthy ex-Governor, DAVID JOHNSON, for his admirable article on the "Construction of Smoke-houses, curing bacon, &c." The Governor has surely constructed a model smoke house, such an one, or any thing equaling it, will but rarely be found we think. The practice of bagging hams, as pursued by the Governor, is undoubtedly a good one. We have proved it to be such. But since our discovery of the black pepper as a preventive against the fly, we have not found the bag, &c., at all necessary. For an account of the black pepper remedy, see Vol. 1, No. I, of the Farmer and Planter.

Our old friend, and former neighbor, the Hon J. H. B., of the Mississippi Senate, will please accept our thanks for his very friendly and interesting letter, with amount enclosed. His request has been attended to, and papers forwarded as directed. We shall be pleased to receive the promised article from the Hon. A. R. F. on his successful culture of the Cherokee Rose for hedges, as well as other favors which are unfortunately just at this time greatly in need of, if not in "distress" for.

Our Exchanges.

Since our last issue we have received the following works which we with pleasure place on our exchange list. We trust the publishers will not play the game that some others have on us—*send one copy to get a puff and then discontinue.*

PUTNAM'S SEMI-MONTHLY LIBRARY, No. III, Or, Walks and Talks of an American Farmer in England.—A neatly printed volume of some 250 pages—paper good, and type large, with thick paste-board cover—semi-monthly at 25 cts. per number, or \$5 per annum in advance. By G. P. Putnam, New York.

This work having just come to hand, we have not had time to examine its contents, but from the "opinions of the press," we are persuaded it will be found a highly amusing and entertaining work. "Hunt's Magazine," in noticing this work, says: "Few enterprises of this kind present more attractive features at the onset than this. The essays are pithy, entertaining and valuable, and it will hardly be possible to select a greater variety of choice reading at so cheap a price as this and the subsequent volumes promise."

THE MUSICAL WORLD and Journal of the

Fine Arts.—The March number of this work has been received. From the prospectus we make the following extract: "The Musical World and Journal of the fine Arts; the cheapest and best miscellany of music in the world: giving annually to its subscribers, over five hundred pages of valuable and interesting matter, and embracing nearly one hundred pages of choice music. Published on the 1st and 15th of every month, at \$1 50 per annum."

The Musical World and Journal of the Fine Arts, (says the N. O. Baptist Chronicle) is receiving encomiums from the press, both secular and religious. It is in truth a very ably conducted periodical, and deserves the patronage of all lovers of music, both professors, amateurs, and learners, and of those who delight in literature. We are informed by one who is a better judge in musical matters than ourself, that the pieces of original music published in the paper, are alone worth far more than the price of subscription. Published by Oliver Dyer, 257 New York.

Postage.

Some of our subscribers think they are charged too much postage on the Farmer and Planter. The postage on it for one quarter (three months), is as follows:

Under 50 miles.....	1½ cents.
Over 50 and not over 300.....	2½ "
Over 300 and not over 1000.....	3½ "
Over 1000 and not over 2000.....	5 "
Over 2000 and not over 4000.....	6½ "
Over 4000.....	7½ "

TO THOSE WHO WRITE FOR THE PRESS.—Freeman Hunt, Esq., the wise and practical editor of the Merchant's Magazine, gives the following good advice to those who would contribute to his pages. Correspondents would save a great deal of valuable time and prevent many serious mistakes in composition, by giving it their attention:

"In the first place, all names—of country, place or thing, and especially of individuals—should be written distinctly, with dots over the i's, crosses only across the t's, and a plain distinction between u's and n's, as compositor has no connecting sense of grammar to guide him in deciphering a name when it is obscurely written.

Secondly, when the capital letter I or J occurs in a name (as Henry I. Jones,) make the pen to represent it in print, and then no mistake can occur; and where a list of names, or more than one is written, a comma should be made after each—as Thomas Smith Walker Johnson, might be made to signify one, two, or four names.

Writers for the press should understand, that as a general thing, compositors are paid by the piece for their work, and that, if their manuscript is badly

written, it is a downright robbery of their labor, as they are compelled to waste hour upon hour to put it into intelligible shape, which the author has hurriedly or carelessly neglected to do."

QUICK DIGESTION—HEALTHY FOOD.

Of all the articles of food, boiled rice is digested in the shortest time—an hour.—As it also contains eight-tenths nutritious matter, it is a valuable substance for diet. Tripe and pig's feet are digested almost as rapidly. Apples, if sweet and ripe, are next in order. Venison is digested almost as soon as apples. Roasted potatoes are digested in half the time required by the same vegetable boiled, which occupy three hours and a half more than beef or mutton. Bread occupies three hours and a quarter. Stewed oysters and boiled eggs are digested in three hours and a half—an hour more than required by the same articles raw. Turkey and goose are converted in two and a half hours, and an hour and a half sooner than chicken. Roasted veal, pork and salted beef occupy five hours and a half—the longest of all articles of food.—*Ex.*

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MASONIC NOTICE.

THE next Regular Communication of PENDLETON LODGE, No. 34, A. F. M., will be held on Monday evening, 3rd of May. By order of the W. M. W. H. D. GALLARD, Secretary.

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The experience of thirty years relative to the proper construction of Implements and Machinery for the use of Southern Farmers and Planters, affords us an advantage that time and experience alone can give, and for the interest of our customers as well as our own, we solicit a continuance of their patronage, which will always command our most careful consideration, and by our having the advantage alluded to, insure them against the possession of a stock of Implements of light and inferior construction, and, as regards the South, of doubtful utility.—We offer for sale the following synopsis of our stock of IMPLEMENTS and SEEDS, and refer to our Illustrated Catalogue (just published) for particulars, viz:

PLOWS.

Of PLOWS, we have in our collection the largest assortment to be found in this or any other country, including the MARYLAND SELF-SHARPENING, with a Mould Board of unrivalled form, made suitable for the roughest lands and to economize labor; also, the Sinclair & Moore and Patuxent pattern, for clay and light loam; the Echelon, with 2 and 3 mould boards set regular for seeding and cultivation; several excellent Eastern and Western patterns; Subsoil Hill-side PLOWS, &c.

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WHEAT, CORN, AND SEED DRILLS. The entire success of our Patent Wheat Drill, the last season, and the increased demand for them, has induced us to manufacture this article extensively for the approaching season. Price \$90. The Corn and Seed Drill made on same plan, \$20.

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CORN SHELLERS.—The Improved Single and Double Spout (price \$10 @ \$16) are our best hand power machines; and the Cylindrical at \$30, for large crops. Several other patterns are made at \$16 @ \$80.

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HORSE POWERS.—Sweep and Railway,

of various sizes, for 1 to 12 horses—price \$75 to 135.

THRESHING MACHINES.—Made with open Wrought Iron Cylinders—most excellent and effectual—price \$35 to 60.

WHEAT FANS, with Separating Fixtures, and warranted equal in efficiency to any in this market—price, \$25, 30 @ 35.

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GARDEN AND FIELD SEEDS.—Our stock of Garden Seeds are principally from the Clairmont Gardens, grown under our immediate supervision—such as we find necessary to import, are obtained from seed establishments in the South of Europe, where they become quite as well matured as those raised in this latitude. The following kinds, or a synopsis of our stock of Seeds, are in store and for sale, viz: Mangle Wurtzel; Large Red and Yellow Globe Rutabaga; Hybrid and Large White Table Turnip; White Sugar and Blood Beet, *extra fine*; Large White Field and Table Carrot, superior; Large Heading, Savory and Early Cabbage Seeds; Early Corn, Cucumber, Lettuce, *early and late*; Melons, Onion Seed, Parsnip, Early and Late Peas, *several new sorts*; Early and Late Potatoes, Radish Seed, Squash, Tomato, Herb Seeds; Flower Seeds, 300 *fine sorts*—Also, American Grass Seeds, *of every description*—Lucerne Vetches or Tares, English Rye Grass, Sweet Scented Vernal Grass, English and American LAWN GRASS SEED, Herd and Sheep Fescue Grass, Crested Dog's Tail, &c.

FRUIT AND ORNAMENTAL TREES AND PLANTS.—Orders will be received for the Clairmont Nurseries, now conducted by Wm. Corse, whose assortment of Fruit and Ornamental Trees, Plants, &c., is extensive, carefully grown and orders put up with care.

April, 1.

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RETURNS his thanks for past favors, and begs leave to inform his friends and the public in general, that his catalogue for 1851 is now ready, and will be had on application to his agent, Mr. E. BOSSANGE, 138 Pearl street, New York. He offers for sale a large collection of the finest Fruit, Forest and Ornamental

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 Feb., 1852. 2-p.

✎ All agricultural papers will insert the above three times, and send the bill and a copy of each paper to **E. BOSSANGE.**

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January, 1852. 3-c.

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✎ THE Subscriber offers for Sale the Tract of Land on which he now resides, lying in the fork of Seneca and Tugaloo rivers, on the main road from Pendleton to Carnsville, and twelve miles from the former place, containing nine hundred (900) acres; about one hundred (100) of which is Beaver-dam Bottom. The place has on it a large and comfortable Dwelling House, a good Kitchen, and all other necessary out buildings. The site is a beautiful one, the water fine, and the place as healthy as any in the District. To a purchaser the crop now growing on the place will be sold, if desired, on the most favorable terms.

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 Pendleton, S. C., Aug. 13, 1851.